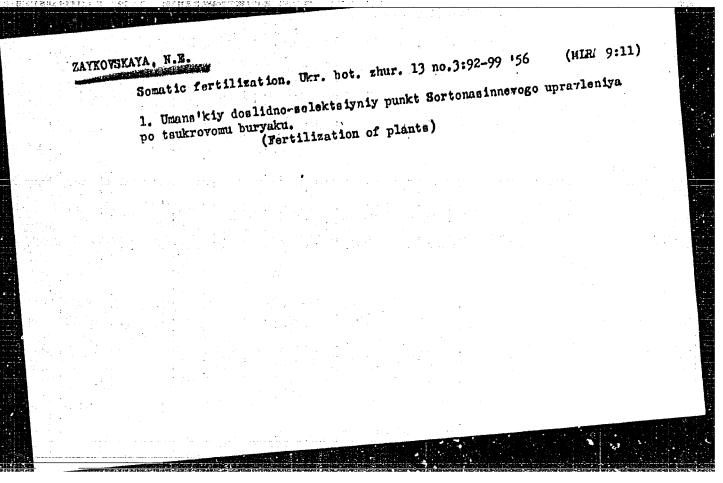
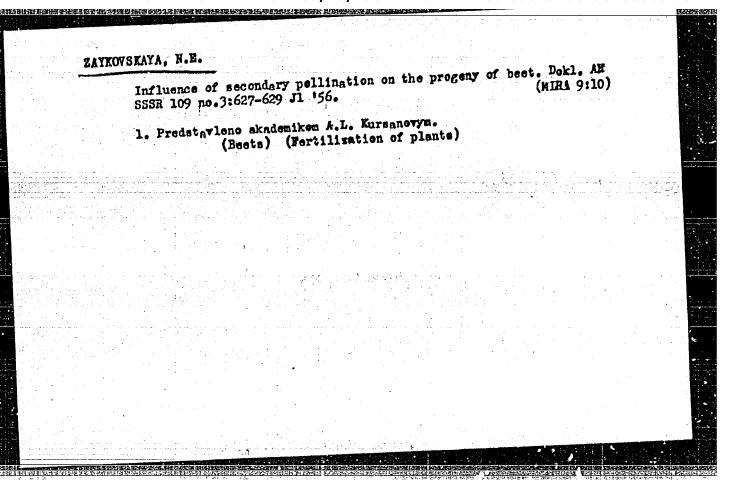


. ZAYKOVSKAYA, N. Ye. . USSR (600)					
. Beets and Beet Sugar	sugar beet. Izv	. AN SSSR. Ser	, biol. no. 4,	1952	
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9. Monthly List of Russia	n Accessions, Lil	oral; of Congre	ss. January	_1953, Uncla	ssified.

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ZAYKOVSKAYA LUI USSR/Agricultur	E - Biology	
Car: 1/1		
Author	Zaykovskaya, N. E	
Title :	Some peculiarities of flowering and fertilization of beets	
Periodical :	Izv. AN SER. Ser. biol. 3, 79-86, May/June 1954	εl
Abstract	Since fertilization takes place faster in cases of cross-pollimation when self-pollination takes place, the decisive moment is not the time when self-pollination takes place, the decisive moment is not the time the pollen lodges on the stigmatic part of the pistil, but the speed with which it interacts with the remale tissues. Preliminary speed with which it interacts with the remale tissues. Preliminary speed with which it interacts with the remale tissues. Preliminary speed with which it interacts that pollen, deposited into the emeryon sac after the ovule become fertilized and already began to develop, bryo sac after the ovule become fertilized and already began to develop, transmit their characteristics to succeeding generations. Such transmission transmit their characteristics to succeeding generations. Such transmission transmit their characteristics to succeeding generations. Further the albert transmission of somatic cells of the nucellus cannot of the supplementary pollen and their subsequent interaction with the albert transmission of the ovicell, central cell, and the somatic cells of the nucellus cannot of the ovicell, central cell, and the somatic cells of the nucellus cannot be considered equivalent. To clarify the significance of each one of these phases of fertilization further research is necessary. Illustrations.	
Institution	: Experimental Base, All-Union Scientific-Research Sugar Beet Institute, Uman'.	
Submitted	: September 27, 1953	

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ZAYKOVSKAYA, D.E

USSR/Cultivated Plants - Technical. Oleaginous, Sugar-Bearing.

L-5

: Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69320

Abs Jour

Zaikovskaya, N.E. Author

The Effect of Pollen of the Secondary Pollination on Inst Title

Beet Generations.

: Dokl. AN SSSR, 1956, 109, No 3, 627-629 Orig Pub

: Experiments are described on verification of the influence Abst

on the developing young organism of pollen which settles on the stigma after fecundation of the reproductive cells. In the first variant of the experiment the flowers were pollinated by a mixture of sugar-beets and table beets, taken in qual quantities; in all the following variants the first pollination was made only by pollen of sugar beets, but the pollen of table beets was applied thus:

in the second variant after 8 hours, and in the 3rd after

24 hours, in the 4th after 48 hours, and in the 5th after

Card 1/2

USSR/Cultivated Plants - Technical. Oleaginous. Sugar-Bearing.

L-5

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69320

72 hours. The seeds were collected separately in accordance with the experimental variant and in the spring of the following year they were sown in divided seedrows; the seeds of the same plants which bloomed naturally served as a control. In cultivation the sprouts were analyzed and, on digging, the grown plant was analyzed. The conclusion was that in beet flowers pollen which fell on the stigms on the 2nd or 3rd day of flowering takes part in formation of hereditary properties of succeeding generations, despite the fact that the pollen penetrates into the seed bud after germination and the beginning of development of zygote and endosperm. In view of participation of pollen in the process of fecundation, having fallen on the stigma on the 2nd or 3rd day of flowering, the presence of proterandry should be acknowledged in the beet.

Card 2/2

l. Vsesoyusnyy nauchno-issledovatel'skiy institut sakharnoy swekly. g. Kiyev. (Sugar bests) (Pollen)		160-	gar beet pollen.			
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	Method for a rapid 632 Jl-Ag '61.	chromosome count	, ngi obbo	(MIRA 14:7)	
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ZAYKOVSKAYA, N.E., kand.biolog.nauk

Amitotic cell division in sugar beets. Agrobiologiia no. 3: 459-461 My-Je '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovateliekiy institut sakharnoy svekly, Kiyev.

ZAYKOVSKAYA, N.E. [Zaikovs'ka, N.E.]

Cytoplasmic male sterility in sugar beets. Ukr. bot. zhur. 20 no. 5:20-32 '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovateliskiy institut sakharnoy svekly, laboratoriya tsitologii i genetiki.

of duc	ect of alcaloi sugar beets ar sing polyploids	ids on meio nd the effe s. Zhur. ob	ctiveness o biol. 24	f such acti	ons in pro-		
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87	Vsesoyuznyy n ekly, Kiyev.	auchro-issl	Ledovatel†sk	ciy institut	; sakharnoy		
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in a field of cent	Huidized (boiling) bed of free-f. rifugal forces. Khim. mash. no. (Fluidization)	312-4 My-Je 16D. (MIRA 1415)	

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New equipment for washing Automobiles. (MLEA 9:9) My '56. (AutomobilesMaintenance)	ZAYKOVSKI	Co.B.			trangn. 75	ne.5:15	i-18		
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SOV/19-58-6-657/685

AUTHORS:

Gridunov, A.S., Zaykovskiy, B.S., Karelin, A.K., Sergeyev, P.A., and Prokhorov, V.A.

TITLE:

An Electromagnetic Vibration Drive (Elektromagnit-

nyy vibratsionnyy privod)

PERIODICAL:

Byulleten' izobreteniy, 1958, Nr 6, p 146 (USSR)

ABSTRACT:

Class 8le, 52. Nr 113681 (587440 of 9 Dec 1957). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A vibration drive attached at an angle to a conveyer chute and bearing additional weights for obtaining resonance. To prevent detrimental vibration in the conveyer, the electromagnetic vibrator is designed in the form of a yoke on columns, with two electro-magnetic cores placed symmetrically on both sides and fastened rigidly to casings on springs support-

ed by the yoke plate.

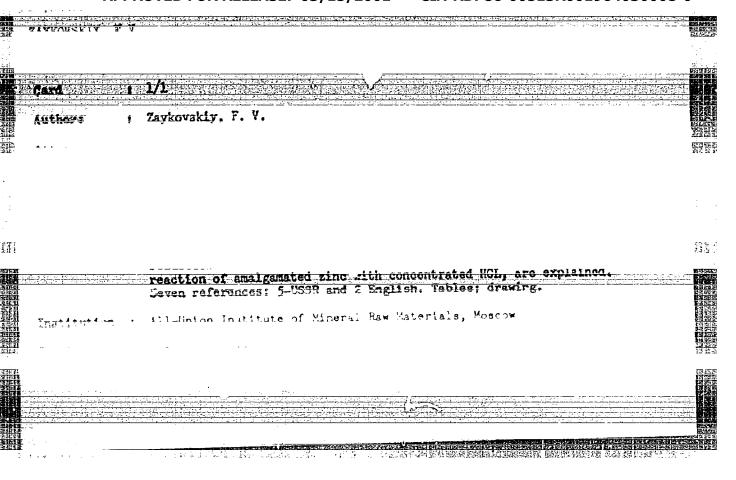
Card 1/1

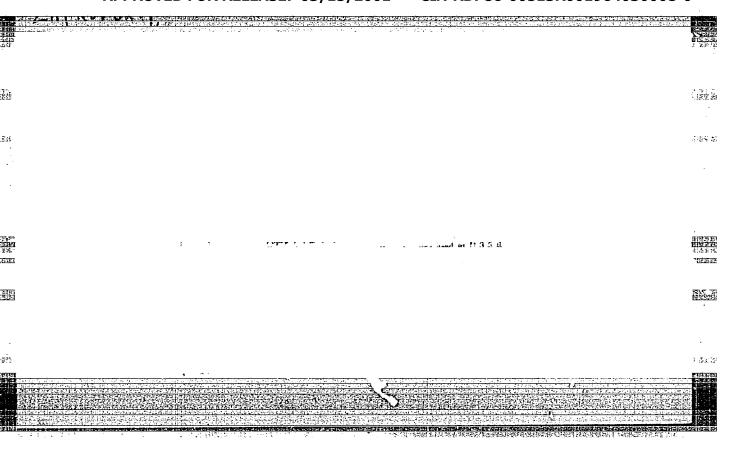
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7,	Problem of loss of mescury in general forensic chemical analysic. Apt. delo. No. 5, 1952.	
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9.	Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassific	ed.





2 AYKOVSKIY F.B

USSR/Analytical Chemistry - Analysis of Inorganic Substances; G-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1229

Zaykovskiy, F. B. Author:

A-U INST. MINERAL RAW MATERIALS None Institution:

Extractive Separation of Niobium, Tantalum, and Titanium Title:

Original

Zh. analit. khimii, 1956, Vol 11, No 3, 269-277 (with a summary in Periodical:

English)

Abstract: A new method has been developed for the separation of Nb, Ta, and Ti, based on the varying extract ability of the pyrocatechinates of these

elements in oxalic acid solution. At pH 3 n-C4H9OH in the presence of excess pyrocatechin extracts the pyrocatechinates of Ta and Ti. Under such conditions the Nb-complex is retained in the aqueous phase. The Ti is separated from the extract by a second extraction, using 5% H2SO4. For the complete separation of Ta from Ti the operation must be repeated. The pyrocatechinates of other elements (Fe, Zr, Sn, and

Mo) are not extracted under the conditions described. The method is

Card 1/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001964030008-0"

USSR/Analytical Chemistry - Analysis of Inorganic Substances, 0-2

Abst Journal: Referat Zhur - Knimiya, No 1, 1957, 1229

Abstract: applicable to the separation of microquantities of No and Ca.

error is ~10%.

Card 2/2

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AUTHORS:	Zaykovskiy, F. V.; Garkhardt, L. I.
TITLE:	The Photometric Determination of Thorium by Arsenazo in the Presence of Zirconium. Titanium and Rare Earths (Fotometri Presence of Zirconium. Titanium and Rare Earths (Fotometri cheskoye opredeleniye toriya s arsenazo v prisutstvii tsirkoniya, titana i redkozemel'nykh elementov)
PERIODICAL:	Zhurnal unaliticheskoy khimii, 1958, Vol. 13, Nr. 3, pp. 274-279 (USSR)
ABSTRACT:	The photometric determination of thorium by arsenazo (Ref 1) The photometric determination of thorium by arsenazo (Ref 1) Polytonian the determinations of the polytonian than the determinations of the polytonian than the determination of the photometric determination of thorium by arsenazo (Ref 1).
Card 1/3	the weight conditions to remove the disturbing in- the author, sought conditions to remove the disturbing in- the author, sought colored solutions of the therium com- showed that the violet colored solutions of the therium com- showed that the violet colored solutions of the therium com- plex with arsenazo possess the highest optical density at pile values of 1,3 3,0, whereas the optimum cororing of the

The Photometric Determination of Thorium by Arsenazo in the Presence of Zirconium, Titanium and Bare Earths

complex forms at concentrations of the reagent of : - 1,5 mg in 25 ml solution. Based on the fact that zirconium is more strongly inclined to complex formation than therium, compounds were sought which complexly bind zirconium without reacting with thorium. It became evident that tartaric acid removes the disturbing influence of ziroonium in the photometric determination of thorium with arsenazo. Thus even an amount of 700 y ziruchium doss not disturb the determination of therium in the presence of 55 mg tartaric acid in 25 ml. solution. In the presence of still more tartaric acid (75 . 100 mg) the optical density of the solution of the thorium complex considerably decreases, which makes the determination difficult. In amounts up to 12c y in 25 ml soluof the thorium complex. In the presence of 50 mg tartaric acid, 150 y titunium in 25 ml colution are not disturbing either. Asserbio acid can also be used for masking titanium. Hydrogen peroxide masks titanium but reduces the optical density of the solution of the thorium complex with arsenazo. At a pH of 1.3 up to a 95-fold excess mrs earths do not disturb the thorium determination. Before the photometric

Card 2/3

75-13-3-2/27
The Photometric Dutermination of Thorium by Arsenazo in the Presence of Zirconium, Titanium and Rare Earths

evaluation corium must be reduced to the trivalent stage which is attained by ascerbic acid in a weakly acid solution. When using 50 mg tartaric acid and 10 mg ascerbic acid in 25 ml solution for the masking of rare earths, therium can practically be determined in the presence of any amounts of rare earths, as even a 900-fold excess of the latter as compared to therium does not influence its determination. A working prescription for the determination of therium in the presence of zirconium, titanium and rare earths was worked out which, like all performed investigations, is exactly described. There are 4 figures, 5 tables, and 10 references, 5 of which are Soviet.

ASSOCIATION:

Vsesoyuznyy institut mineral'nogo syr'ya, Moskva (Moscow, All-Unioa Institute of Mineral Raw Materials)

SUBMITTED:

February 9, 1957

Card 3/3

1. Thorium-Determination

sov/75-13-5-2/24 Zaykovskiy, F. V., Gerkhardt, L. I. AUTHORS: Separation of Thorium From Titanium, Zirconium, and Other Accompanying Elements by Homogeneous Precipitation (Otdeleniye TITLE: toriya ot titana, tsirkoniya i drugikh soputstvuyushchikh elementov metodom gomogennogo osazhdeniya) Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 5, pp 513-518 PERIODICALE (ussn) The method of "homogeneous precipitation", which A. P. Terent'yev and his collaborators (Ref 18) also call the "method ABSTRACT: of creating reagents" and which other authors refer to (Ref 19) as "indirect precipitation", is much used in analytical chemistry for the determination of a number of metals (Refs 1-17). In these cases, the reagents are not ionized compounds, which form ion precipitants by hydrolysis, dissociation or disintegration of complex organic molecules into less complex substances. Only a few of the large number of organic compounds which in solution can form ion precipitants are presently used (Refs 10,20,21). For the quantitative determination of thorium it is necessary to obtain a coarse crystalline precipitate, which may be achieved in the method of homogeneous precipitation. For this end, Card 1/4

Separation of Thorium From Titanium, Zirconium, and Other Accompanying Ele-

the authors of the paper under review used acetonedioxalic acid as reagent (Ref 23). This compound in aqueous solution forms a precipitant for thorium - the oxalate ion. In an aqueous acetone solution the degree of co-precipitation of accompanying elements is lower (Refs 18,24). A large surplus of reagent should be added as this reduces both the co-precipitation of zirconium and titanium (Ref 22) and the solubility of thorium oxalate (Ref 25). The result of the experiments was that there is a quantitative precipitation of thorium as oxalate in a homogeneous solution at pH 0,6-1,5. In case of a higher pH-value the precipitation is incomplete. If there are calcium ions as co-precipitants, there is a quantitative precipitation of thorium still at pH 2,62. A microcrystalloscopic comparison between the thorium oxalate, which was thus obtained, and the thorium oxalate, that was obtained in a regular precipitation of thorium with oxalic acid, showed that in the homogeneous precipitation the crystals noalesce into bigger crystals with sharply marked surfaces. It to mean of the homogeneous precipitation thorium can be separated quantitatively from foreign

Card 2/4

SOV/75-13-5-8/24

Separation of Thorium From Titanium, Zirconium, and Other Accompanying Elements by Homogeneous Precipitation

ions. There is sometimes a co-precipitation of zirconium and titanium, however, in such quantities as not to interfere with the following determination of thorium with arsenic azo (Ref 29) in the presence of tertaric acid. Also rare earths are prodipitated at the name time, they do, however, not interfere with the determination of thorium. The precipitation of thorium in a homogeneous solution with acetoneoxalic acid therefore has a number of advantages: an easily filterable precipitate is obtained; there is hardly any co-precipitation of zirconium and titanium; when foreign ions are present, there is an immediate (without previous operations) and quantitative precivitation of thorium as an oxalate. A new method which is described in detail was worked out for the determination of small amounts of thorium (0,002-3,0%) in natural matter by homogeneous precipitation and following determination of thorium with arsenic azo I. This determination takes 10 to 12 hours for 10 simultaneous analyses. There are 1 figure, 3 tables, and 35 references, 9 of which are Soviet.

card 3/4

Separation of Thorium From Titanium, Zirconium, and Other Accompanying Elements by Homogeneous Precipitation

ASSOCIATION: All-Union Institute of Mineral Raw Materials, Moscow

SUBMITTED: April-2, 1957

Card 4/4

5(2) Authors:	Zaykovskiy, F. V., Bashmakova, V. S. 364/75-14-1-2/22
TITLE	Photometric Determination of the Sum of Hare Earth Elements in Ore and Rocks (Fotometricheskoye opredeleniye summy redkozemel'nykh clementov v rudakh i poredakh)
PERTODICAL:	Thurnal analiticheskoy khimii, 1959, Vol 14, fir 1, pp 50-54 (USSR)
ABUPRACT:	A photometric method for the determination of 0.01% - 3% of the sum of rare earths in ores and rocks is worked out in the present paper. This is a continuation of earlier published research works (Fefs 1, 2). The determination takes place by the aid of creen-acc. The optical density of the solutions was measured on a photo-colorimeter FEK-M by the aid of green filters (\lambda = 570m\mu). Equimolar quantities of the cerium and
	yttrium group elements possess almost the same optical density An increase of yttrium content in the sum of rare earths cause an increase in optical density. In the presence of sulfo- salicylic acid titanium (IV) and zirconium scarcely influence the optical density, whereas therium causes it to increase. Ir
Card 1/3	the presence of 50 mg sulfosalicylic acid on 25 ml solution

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Photometric Determination of the Sum of Rare Earth Elements in Ores and Rocks 507/75-14-1-9/32

calcium in quantities up to 6 mg does not influence the optical density of the solution, while larger quantities of Ca increase it a little. Thoron, arsen-azo and Schiff bases are suitable for separating small amounts of thorium. The corresponding thorium complexes are formed, that can be separated by the aid of active carbon. The reagent must be present in large surplus, as it is likewise adsorbed by active carbon. Most suitable is the use of the easily obtainable Schiff base from salicyl-aldehyde and o-amino arsonic acid (o-aminophenyl arsonic acid is probably meant here). Zirconium behaves in much the same way as thorium. The following method was employed for separating the rare earths from the accompanying elements: oxalate ion forming from the hydrolysis of acetone dioxalic acid yields a coarse-crystalline precipitate of oxalates of the rare earths (Ref 2). The rare earth separation according to this method is described in detail, as well as the further processing of the rare earths and the photometric determination. The solutions of the rare earths complexes with arsen-azo follow the Beer law. The determination errors amount to 20 - 5%, but also higher deviations may occur. The usual yttrium content in ores and

Card 2/3

Photometric Determination of the Sum of Rare Earth Elements in Ores and Rocks		
	rocks (<40%) increases the determination results by no more than 5 - 6%. By the aid of the method claborated as much as than 5 - 6%. By the aid of the method claborated as much as than 5 - 10 analyses may be carried out within 3 - 10 hours. There are 2 figures, 5 tables, and 7 references, 5 of which are Soviet.	
ASSOCIATION:	Vsodoyuznyy institut mineral mogo syriya, Moskva (All-Union Institute or imprel mog Materials, Moscow)	
SUBMITTED:	October 12, 1957	
Card 3/3		

SOV/75-14-4-10/30 5(2), 5(3)Zaykovskiy, F. V. AUTHOR: Complexometric and Photometric Determination of Thorium in TITLE: Minerals and Ores Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, PERIODICAL: pp 440 - 444 (USSR) A rapid complexometric method of the determination of great amounts of thorium, and a photometric method of the determina-ABSTRACT: tion of small amounts of thorium in minerals and ores by using arsenazo (Refs 11-13), are proposed in the paper under review. Conditions of a complexemetric determination of thorium in the presence of calcium, titanium, zirconium, and rare earths were worked out. Iron (III) thiocyanate served as an indicator for titration. Calcium and rare earths do not disturb the determination. Zirconium and titanium are also titrated by Complexon III. Thorium is separated from the majority of zirconium and titanium by the iodate-tartrate method (Ref 11). Thorium is then quantitatively freed from zirconium and titanium by precipitation with acetone diovalic acid. The results of a complexometric determination of thorium in the presence Card 1/3

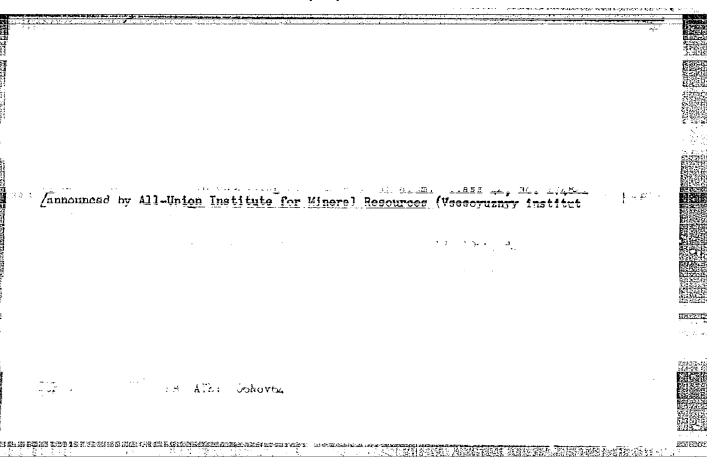
Complexometric and Photometric Determination of Thorium in Minerals and Ores

sov/75-14-4-10/30

of calcium (Table 1), zirconium, titanium (Table 2), and rare earths (Table 3), are shown by three tables. Table 4 shows the results of a complexometric titration of thorium, after the separation of the disturbing metal icns. The course of analysis from the decomposition of the material up to the titration with Complexon III is described in the paper very accurately. For the complexometric determination of thorium in minerals (monazite, ferrothorite, etc), the solutions must be entirely free from traces of zirconium and titanium. The results of 13 determinations of thorium in various natural materials are shown in table 6. The determination of thorium, after separating the disturbing elements, is also possible photometrically, with the use of arsenazo and tartaric acid (Ref 12). This method was employed for the determination of thorium in substances of complex composition (0.005-4% of thorium, up to 60-70% of zirccnium and titanium). Results of the photometric determination of thorium in synthetic mixtures after separation of the disturbing metals, are shown in table 5. Table 7 shows the results of 10 colorimetric determinations of thorium in minerals and ores. Both methods of

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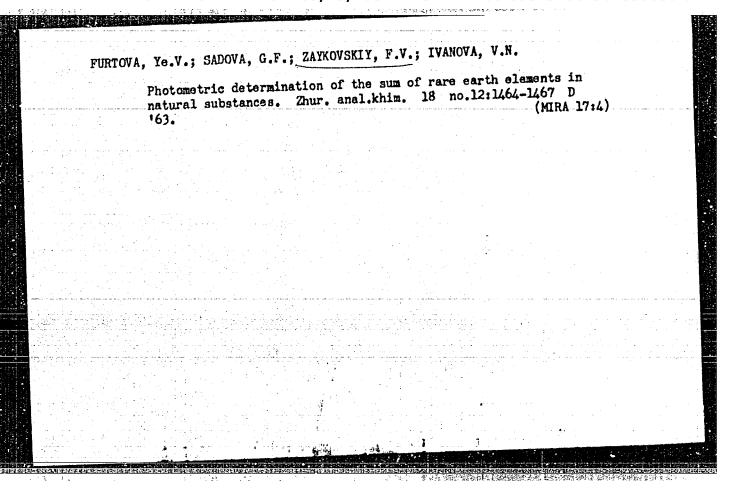
o-m-levometr	ic and Photometric Determination	on of sov/75-14	1-4-10/30
Thorium in M	determination described in the producible results. The determination took 8-12 hours. There are Soviet.	e paper produce accurat	e and re- these two eferences,
	methods took 8-12 hours. 5 of which are Soviet.		
SUBMITTED:	March 20, 1958		
Card 3/3			



FURTOVA, Ye.V.; SADOVA, G.F.; IVAROVA, V.N.; ZAYKOVSKIY, F.V.

Photometric determination of thorium in natural materials
with the use of arsenazo III. Zhur. anal. khim. 19 no. 1:
94-96 '64.

(MIRA 17:5)



1. All-Union Scientific-Research Institute of Minoral Raw Materials, Moscow.	E. Jul. & Carling Spice of the Carl	Refining o	030 Ag '6				. •	16:12)	
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SHELLER, V.R. [Schoellor, W.R. deceased]; POUELL, A.R. [Powell, A.R.];

BELOFOL'SKIY, M.P. [translator]; EYKOVA, V.S. [translator];

KMIPOVICH, Yu.N. [translator]; KRASIKOVA, V.M. [translator];

POPOV, N.P. [translator]; STOLYAROVA, I.A. [translator]; YUSOVA,

V.A. [translator]; ZAYKOVSKIY, F.V., retsenzent; SHCHEREOV, D.P.,

retsenzent; NEMAROVA, G.F., red. izd-va; IVANOVA, A.G., tekhn.red.

[The analysis of minerals and ores of the raror elements] Analiz

minoralov i rud redkikh elementov. Pod obshchei rod. IU.N. Knipo
vich i N.P. Popova. Moskva, Gosgeoltekhizdat, 1962. 447 p.

(MIRA 15:12)

(Mineralogy, Determinative) (Metals, Raro and minor)

ZAYKOVSKIY, F.V.: FURTOVA, Ye.V.: SADOVA, G.F. Separation of rare earth elements from materials containing iron, calcium, and phosphates. Zhur.anal.khim. 17 no.2:202-205 Mr-Ap 62. (MIRA 15:4) 1. All-Union Institute of Mineral Raw Materials, Moscow. (Rare earthsAnalysis) (OresAnalysis)	
Mr-Ap 62. (MIRA 15:4) 1. All-Union Institute of Mineral Raw Materials Moscow	
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1. All-Union Institute of Mineral Raw Materials, Moscow. (Rare earthsAnalysis) (OresAnalysis)	
(Rare earthsAnalysis) (OresAnalysis)	
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S/081/62/000/003/036/090 B156/B102

AUTHOR:

Zaykovskiy, F. V.

TITLE:

Polymeric substances as substitutes for glass, porcelain,

and pletinum

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 3, 1962, 180, abstract 3Ye42 (Byul. nauchno-tekhn. inform. M-vo geol. i okhrany

nedr SSSR, no. 4, (21), 1959, 65-66)

TEXT: Brief particulars (chemical stability, heat resistance, etc) are given for fluoroplast-3 (fluorethene) and fluoroplast-4 (teflon), polyethylene, "chirade", irratene, polyisobutylene, and polyvinyl chloride; the particulars show that these substances can in many cases be used as substitutes for various types of chemical vessels made of glass, porcelain, or Pt. [Abstracter's note: Complete translation.]

Card 1/1

Photometric determination of rare earth elements with salicylfluorone. Zhur. anal. khim. 16 no. 1:29-31 Ja-F '61. (MIRA 14:2) 1. All-Union Institute of Mineral Raw Materials, Moscow. (Isoxanthenone) (Rare earths—Analysis)

8/075/61/016/091/005/019 B013/B055

Zaykovskiy, F. V. and Sadova, G. F.

TITLE:

Photometric Determination of Rare-earth Elements Using

Salicylfluorone

PERIODICAL: Zhurnal analiticheskoy khimii, 1961, Vol. 16, No. 1, pp. 29-31

TEXT: The present publication describes a method for the photometric determination of rare-earth elements using a new reagent, Salicylfluorone [9-(o-hydroxy-phenyl) 2,3,7-trihydroxy-fluorone]. V. A. Nazarenko and M. B. Shustova suggested this reagent for the photometric determination of thorium and sulfates. The pH at which the most intensive color develops with Salicylfluorone in solutions of rare-earth elements was determined by experiments with cerium and yttrium. As may be seen in Fig. 1, cerium forms a colored compound with Salicylfluorone at a higher pH than yttrium. The optical density of cerium- and yttrium Salicylfluoronate solutions was found to be the most stable at pH 6.7 - 6.8. A 20% hexamethylene-tetramine solution was used as buffer. An increase in pH leads to an undesirable increase in the optical density of the reagent.

Card 1/3

Photometric Determination of Rare-earth Elements Using Salicylfluorone S/075/61/016/001/005/019 B013/B055

At pH 6.8, the molar extinction coefficient of solutions of the Salicylfluorone complexes of cerium, samarium and lutecium was, in the average, 17500. The quantity of Salicylfluorone required for maximum color intensity of the cerium complex is 0.75 - 1 ml of an 0.2% alcoholic solution to 25 ml of sample solution (Fig. 2). The solutions of these rareearth complexes with Salicylfluorone obey Beer's law. The error caused by the presence of major quantities of two rare-earth elements in the ore or mineral for analysis is insignificant in photometric determination of the total rare earth elements. With Salicylfluorone, just as with Arsenazo, yttrium forms intensely colored complex solutions having practically double the optical density of the corresponding cerium complex solutions (Fig. 3). Fig. 4 represents the straight calibration curves for the ceriumand the yttrium group. At an yttrium content of only 10 - 15% of the total of rare-earth elements the slopes of the cerium- and the yttrium group calibration curves do not differ substantially. Calcium and magnesium, which interfere in the photometric determination of rare-earth elements by forming colored compounds with Salicylfluorone, may be masked with sulforalicylic acid. The results obtained in lare-earth determinations in the presence of large amounts of calcium are very accurate and satis-Card 2/3

 Photometric Determination of Rare-earth Elements Using Salicylfluorone

S/075/61/016/001/005/019 B013/B055

factorily reproducible (Tab. 1). Iron (II) and (III), titanium (IV), thorium, zirconium and uranium also form colored complexes with Salicy'lfluorone the solutions of which obey Beer's law (Figs. 5 and 6). In comparison to Arsenazo I, Salicylfluorone shows much higher selectivity. Determination of the total rare-earth content in barium- and magnesium alloys does not require previous separation of the chief constituents (Table 2), the error thus incurred being within permissible limits. V. I. Kuznetsov is mentioned. There are 6 figures, 2 tables, and 3 Soviet references.

ASSOCIATION: Vsesoyuznyy institut mineral'nogo syr'ya, Moskva (All-Union

Institute of Mineral Raw Materials, Moscow)

September 28, 1959 SUBMITTED:

Card 3/3

CIA-RDP86-00513R001964030008-0" APPROVED FOR RELEASE: 03/15/2001

 New complexonometric indicator, hydroxyhydroquinone pink, and its New complexonometric indicator, hydroxyhydr	
1. Vsesoyuznyy instiut mineralinogo syriya. (Indicators and test papers)	

ZAYKOVSKIY, F.V., starshiy nauchnyy sotrudnik; STOLYAROV, A.G., red.;
BYKOVA, V.V., tekhn.red.

[Methods of chemical analysis of mineral raw materials] Metody khimicheskogo analiza mineral'nogo syr'ia. Moskva, Gos.nauchnotekhn.izd-vo lit-ry po geol. i okhrane nedr. No.6. 1960, 37 p.

(MIRA 14:1)

1. Mosgow. Vsesoyusnyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Chemistry, Analytical) (Mineralogy, Determinative)

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001964030008-0"

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Isolating rare earth elements from minerals. Zhur.anal.khim. 15 no.2:166.169 Kr.Ap (60. (MIRA 13:7) (Rare earths)	ZAYKOVSI	KIY, F.V.; BASH	AXOVA,	v.s.					
		Isolating raino.2:166-169	re earth Kr≟A p	elements : 160. (Rare car	from miner	als. Z	hur.acal	MIRA 13	:7)
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